Editorial preface

Prague meeting IGCP 735: Rocks and the Rise of Ordovician Life – Filling knowledge gaps in the Early Palaeozoic Biodiversification

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Prague, the capital of the Czech Republic and a city literally built on Ordovician rocks, hosted the 3rd virtual meeting of the IGCP 735 (International Geoscience Programme, UNESCO, 2021–2026) from November 18th to 20th, 2024. This programme, entitled "*Rocks and the Rise of Ordovician Life – Filling Knowledge Gaps in the Early Palaeozoic Biodiversification*" focuses on one of the most transformative intervals in Earth's history, which include pivotal evolutionary events such as the Cambrian Explosion and the Great Ordovician Biodiversification Event (GOBE), alongside major climatic shifts that profoundly impacted the biosphere. The geological record of this period provides a unique opportunity to document past environmental changes and offers essential insights into our future.

The meeting was held in a welcoming atmosphere, designed to encourage researchers from across the globe and from all career stages to share and discuss their work. Organized by Martina Nohejlová, Marika Polechová (both Czech Geological Survey), and Lukáš Laibl (Czech Academy of Sciences), the event welcomed seventy-four participants from twenty-one countries across Africa, Australia, China, Europe, North and South America and Turkey. We were particularly pleased by the strong representation of female and early-career researchers, including students. Nearly 50% of attendees were female researchers, and approximately forty people joined the live sessions simultaneously each day. The scientific program featured three keynote lectures by Allison Daley, Michal Mergl and Sofia Pereira, complemented by twenty regular talks and eleven lightning presentations. These contributions spanned diverse topics, including chemostratigraphy, taphonomy, biodiversity, taxonomy, and evolution, primarily focusing on the Ordovician with significant insights into the Cambrian and Silurian. To share the rich geological heritage of the region, we also prepared a virtual field trip to the Czech Ordovician, now available on the IGCP 735 YouTube channel. The full abstract book is available online via the conference website *https://cgs.gov.cz/en/projects/311530-igcp735*.

This special volume of the *Bulletin of Geosciences* contains eleven contributions from the meeting, as well as several new studies. We are delighted by the breadth of research included here, which brings together data on various fossil groups – including brachiopods, echinoderms, ichnofossils, phytoplankton, trilobites and their relatives – and explores their implications for evolution, palaeobiogeography, palaeoecology and stratigraphy. Voldman *et al.* (2026) report a rich assemblage of phosphatized bromalites from the Furongian–Floian strata of NW Argentina, shedding light on the reconstruction of the early Palaeozoic ecosystems. Elicki & Paris (2026) report a mass occurrence of *Cruziana* trace fossils from the Lower Ordovician of Brittany, offering new perspectives on trilobite behaviour, depositional environments, and Gondwanan correlations. Candela *et al*. (2026) describe Tremadocian linguliformean brachiopods from the southeastern Anglo–Brabant Massif in Belgium, revealing affinities with Baltic assemblages and implications for early Ordovician palaeogeography. Adrain (2026) introduces two new trilobite genera from the mid-Tremadocian strata of the Great Basin (western USA), highlighting their unusual effaced morphologies and their uncertain systematic placement. Another trilobite topic is presented by Pérez-Peris *et al.* (2026), who describe new cheirurid trilobites from the Lower Ordovician Fezouata Biota, clarifying their morphology, distribution, and evolutionary relationships. On a similar note, Laibl *et al.* (2026) present a new species of the naraoiid *Soomaspis* from the Upper Ordovician of the Prague Basin, expanding our understanding of the distribution of this rare trilobitomorph arthropod along the Gondwanan margin. Vidal-Marty *et al.* (2026) analyse morphological variability in the mitrate echinoderm *Mitrocystella incipiens* from Darriwilian high-latitude peri-Gondwanan regions, elucidating phenotypic

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diversity, subspecies differentiation, and environmental influences. Nohejlová *et al.* (2026) report a new occurrence of Silurian solutans from the Wenlock of Wales, revealing aspects of their palaeobiogeography, stratigraphic range, and post-Hirnantian evolutionary recovery. Fatka *et al*. (2026) revisit Ordovician fossils preserved in the Semtín diatreme breccia of eastern Bohemia, re-evaluating a historical collection and refining the age and affinities of the contained fauna. Yan *et al.* (2026) document a Katian acritarch assemblage from Wanhe, eastern Yunnan, highlighting its stratigraphic, palaeogeographic, and palaeoenvironmental significance. Finally, Calner *et al.* (2026) investigate Hirnantian carbon isotope trends in the Keel Oolite and overlying Silurian formations of the Arbuckle Mountains, USA, shedding light on stratigraphic correlations and Late Ordovician climatic and extinction events.

We would like to extend our sincere thanks to all the authors for their contributions and to the reviewers whose dedicated feedback helped to ensure this volume's high quality. This collection is a great example of the power of international collaboration, bringing together scientists from around the world to advance our understanding of the Early Palaeozoic world.

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